V. DYNAMICS OF JOBS/HOUSING BALANCE

The creation of geographic imbalances between employment and housing availability is largely a natural economic and sociologic phenomenon with a tendency to be self-correcting over time. Before World War II, job formation in Southern California concentrated around a few major job centers such as downtown Los Angeles, due to the "agglomeration" economies that accrue to companies being in close proximity to one another. Housing developed chiefly in suburban areas with relatively inexpensive land. Housing was connected to job centers by publicly funded highways. With increasing highway congestion over the last fifty years and the depletion of developable land for new industrial sites in urban core areas, jobs have tended to migrate to suburban locations to take advantage of lower land and labor costs and shorter commute times. For example, thirty years ago Orange County cities largely served as "bedroom" communities for Los Angeles companies, but Orange County now is a jobs-rich subregion, with many of its workers living in the Inland Empire.

This phenomenon largely explains why the Southern California region is one of multiple employment centers spread over a vast area, and why average home-to-work travel times have changed little over the last thirty years. In 1990, 68% of commuters surveyed in the region indicated that their drive between home and work was easy, and that the majority of the population lived less than 20 miles from their workplace (Southern California Association of Governments 1990). That same year, being "close to my work" was only ranked eleventh in importance out of sixteen factors considered in choosing a place to live.

However, the booming economy of Southern California over the last decade has markedly increased traffic congestion and, according to recent surveys, has increased commuter drive times. In addition, there are several major development trends that have emerged over the last decade that run counter to achieving a greater job/housing balance throughout the region. The first is the economic ascendancy of the "New Economy" of high-tech, information-based industries. The second is the "fiscalization" of land use brought about by several voter initiatives that have significantly reduced the incentive for local government to support residential development. Fortunately, there are encouraging signs that the expansion of traditional "old economy" industries into currently job poor/housing rich areas of the region could help offset these trends towards increased jobs/housing imbalance. There are also indications that some of the "New Economy" companies are beginning to locate in these areas.

A. The New Economy

It has been argued that the advent of the information-based New Economy of high-tech/dot.com companies should reinforce the natural tendency of business to migrate to areas of high housing availability. This is because these types of enterprises are much less anchored to natural resources and transportation facilities in their siting decisions and are consequently much more "footloose" than traditional industries. Also, the increasingly widespread use of new telecommunications technology has diminished the need for employees to travel to centralized work centers since they can work at home or at satellite work sites just as efficiently.

Findings from recent research on New Economy companies belie these predictions. These companies show an even greater inclination than traditional industries to coalesce around a few distinct locations. Universities, research centers and cultural amenities such as recreational and entertainment opportunities are the main factors that bind them to an area. They need to be close to cutting edge research, and to be able to attract the young, highly educated workers that they require. High-tech and Internet companies also tend to trade ideas and employees among one another, and are unlikely to give up competitive opportunities for synergy with like-minded companies by breaking from the pack.

This section describes the recent experiences of the San Francisco Bay Area and the City of Santa Barbara with the rapid growth of New Economy firms and the pressures that resulted on their limited housing stocks. It also describes the impacts and siting requirements of New Economy firms, the formation of high-tech clusters in the New Economy, and the location of high-tech clusters in the SCAG Region. It should be noted that the discussion of the Internet-related (dot-com) economic explosion in the Bay Area should be tempered as many of those companies have recently gone bankrupt with the ongoing dot-com meltdown, which also has begun to reduce pressures on housing prices and rents there. It should also be noted that Southern California has a more diversified economy than the Bay Area, including a more diversified technology base, and is weathering the sharp economic downturn in internet-related high-tech sectors much better that our northern counterparts.

1. Bay Area Experience

The dense concentration of high-tech, mostly computer-related industries in Silicon Valley near Stanford University, and the preponderance of dot-com companies in amenity-rich San Francisco exemplify how an area can be attractive to these types of companies despite severe housing shortages. In recent years, Silicon Valley has created five jobs for every housing unit built, compared to two jobs per new house in the 1980's. Between 1995 and 1999, housing prices rose 46.2% in an area whose housing prices rank among the highest in the country (Association of Bay Area Governments 1999). A relative modest home will cost from $400,000 to $500,000, and a one bedroom "fixer upper" will fetch about $300,000.

Approximately two out of every three new workers in Silicon Valley have had to find housing elsewhere, and the trend is for more of the same. It is not unusual for someone working in the Silicon Valley to live in eastern Contra Costa County, where the median price of homes ranges from $150,000 to $170,000, or in the central San Joaquin Valley, where new homes are as low as $100,000. This phenomenon has led to daily commutes that are two- and three-hours, each way. The end result has been rapidly mounting traffic congestion in much of the Bay Area, with consequent lost time, wasted fuel, increased air pollution, and frustrated, fatigued drivers. Speeds during peak-hour commutes in the Bay Area are now the second slowest in the nation, the worst being the SCAG Region (Association of Bay Area Governments 1999). A recent survey revealed that 90% of workers who commute over the Altamont Pass between the Central Valley and the Bay Area would shift to nearby jobs if they were available (Vorderbrueggen 2000).

The City of San Francisco has recently been a Mecca for start-up dot-com companies, despite its high housing prices and limited land area to accommodate new housing (the city has built only 8,500 new units for 60,000 new residents over the last ten years). Its numerous and varied cultural amenities appeal to the high-tech information workers in the dot-com companies, many of them lured from nearby Silicon Valley. They are predominantly young, single and affluent. The recent influx of these workers into the city has stimulated a jump in housing demand that has greatly contributed to a rapid escalation of housing prices. Condominium prices rose 40% from August 1998 to August 1999, raising the medium price to $410,000 (affordable to less than five percent of San Franciscans). Eighty-five percent of new condominium owners earn more than $100,000 per year, 60 percent are under 40, and two-thirds are new to the city (Borsook 2000). Over the past two years, rents in the city have risen five-fold, and residential vacancies are less than 1% (Swartz 2000).

The rapid gentrification of minority and low- and moderate-income neighborhoods in the city is the result of high-tech workers competing with other income groups for scarce housing, forcing those that cannot compete economically out of the city, and some into long commutes. The gap between rich and poor in the city has increased dramatically. Evictions are at an all-time high. The faces of the city are changing as 70% of those evicted leave the city (Borsook 1999). The recent shake out of dot-com companies has prompted some money losing companies to move to areas such as Sacramento where rents and salaries are significantly lower (Said 2000). This trend should continue with the ongoing decline of the NASDAQ Stock Market. The continuing shakeout of dot-com companies in San Francisco, with as much as 80% of them predicted to fail, is relieving pressures on residential and office prices and vacancy rates. Prices in the city have begun to fall, and vacancy rates have begun to rise. This correction should help promote a more diversified economy in San Francisco and should improve the long-term health of the city's real estate market (Muto 2001).

In the fall of 2000, city voters narrowly rejected the more stringent of two competing office growth ballot measures proposed to limit the growth of high-tech companies in the city. Several cities located between San Francisco and Silicon Valley have taken steps to protect themselves from the dot-com explosion. Redwood City recently imposed a moratorium on certain new development to better control dot-com growth and the cities of Menlo Park and San Mateo both recently imposed restrictions on new office development. The need for such moratoriums should substantially abate in the future with the continuing contraction of dot-com firms in the Bay Area.

2. Santa Barbara Experience

The City of Santa Barbara has experienced a similar dynamic related to impacts of the New Economy. The city has a very tight housing market due to stringent growth controls. Only 922 new housing units were built in the 1990s, compared to 9,300 in the 1980s (Trounson and Johnson 2001). Technology now represents Santa Barbara's third-largest industry, with tech jobs doubling each year and comprising about a quarter of all new jobs. About half of those jobs did not exist three years ago. In the past, the large majority of graduates from UC Santa Barbara moved out of the area to seek work since the city's main industry, tourism, provided little professional employment. Tech-savvy graduates from the university's computer science and

engineering departments now realize there are ample high-tech opportunities nearby, and increasing numbers are opting to stay. This is placing even more pressure on the city's limited housing supply; only 21 percent of the population can afford a median-priced home of $569,000. Similar to San Francisco, the new high-tech entrepreneurs are breeding resentment among established residents, as they begin to push out poor, mostly Latino families, as well as the middle class, tearing down expensive houses to build even bigger ones (Kelley 2000).

3. Impacts of the New Economy

Undeniably, the rapid growth of the high-tech New Economy is having a profound economic impact wherever it takes root. Most communities that have attracted high-tech industries have found them to be remarkably effective engines of growth. Creating high-salaried employment, they have a much higher than average "multiplier" effect, and act as magnets for supporting industries and jobs, including supplier networks. Since the 1990-91 recession, growth in the high-tech sector has been five times as large as growth in the aggregate economy, and is accounting for an ever-increasing share of national economic output. Success in creating high-tech business clusters is now the distinguishing determinant of regional vitality, accounting for two-thirds of economic growth differences among metropolitan regions (DeVol 2000). The information technology industry in Los Angeles currently generates one out of every eight dollars in the local economy (Tseng et al 2000).

Still, the New Economy can exact a price on the locations it favors. High-tech enterprises can grow far more rapidly than older industries, outstripping the ability of local government to keep pace with planning and provision of services. They can create great income disparities and produce tensions between different income groups and between established and new residents in communities that are affected. Where the housing supply is limited, the New Economy can exacerbate housing shortages and markedly increase competition and prices for available housing. Since most communities desire the economic advantages of the New Economy, a logical strategy would be to spread its job-creating potency to housing-rich areas. However, that could be a challenging endeavor for reasons discussed below.

4. Siting Requirements of New Economy Firms

High-tech, information-based companies that characterize the New Economy are redefining standard criteria that have been conventionally used in industrial siting decisions. Recent evidence shows that they are relatively insensitive to traditional cost factors such as land and transportation costs, as well as housing costs for their employees. The basic resources that these companies require are young, highly educated, technically savvy employees that are in scarce supply. They are the objects of feverish competition among high-tech companies that need them. High salaries are simply not enough to attract these types of employees, who work long hours and want to enjoy life outside work in a cultural environment that appeals to them. This includes cultural amenities such as trendy restaurants, entertainment and retail complexes, recreational opportunities, universities, museums, libraries, parks, mixed-use neighborhoods with architectural character, and diversity of lifestyles.

With unemployment for high-tech employees at an all-time low, employers are becoming hard-pressed to provide this highly educated workforce with the comforts and amenities that they desire. These comforts and amenities are primarily location-based, and are closely associated with downtown urban areas. High-tech industries are consequently gravitating toward cities and away from suburbs, reversing an industrial siting trend of the last several decades (Van Slambrouk 2000). Select cities are becoming the preferred location of the "new urbanites" comprised of single, highly educated professionals, as well as new immigrants from abroad.

Not all high-tech workers are equal in their need for cultural amenities afforded by downtown locations. Workers in the "hard" high-tech industries such as biotechnology, semiconductors and telecommunications are more middle-aged and family-oriented than workers in more creative and culture-based industries such as multi-media and dot-com companies that tend to be young and single. These "hard" high-tech workers generally prefer master-planned, campus-like work settings with good access to parks, schools and shopping centers. Many of them prefer to avoid the congestion and social problems perceived to be associated with urban core/downtown areas, and willingly forego the social diversity and cultural richness inherent to those areas (Kotkin 2000).

A siting determinant for high-tech industry that is growing in importance is access to telecommunications infrastructure such as fiber optic cable. Intercontinental fiber optic lines that terminate in Los Angeles, New York, San Francisco and Washington reinforce these cities' dominance as high-tech and information processing hubs. Main cable lines typically run to downtown locations, where "telco" hotels that house telecommunications companies are being developed because of their ability to tap into the expensive fiber optic networks (Reagor 2000). At the regional level, the availability of multiple fiber optic cables with backup power supplies at high-tech business complexes, research centers and universities accelerate the growth of high-tech clusters around established nodes. Businesses seek locations with good access to fiber optic service and with cable and backup power systems to minimize disruptions and bottlenecks (Cohen 2000). Whether wireless broad band technology will provide a more ubiquitous and accessible telecommunications substitute to fiber optic cable is currently an open question.

Convenient access to an international airport is another important siting factor for high-tech and knowledge-based companies, particularly those that participate in the global economy. Speed is a competitive advantage among high-tech firms, not only in delivering products and services around the world, but also in conducting face-to-face meetings with clients and colleagues in different cities with little advance notice. For companies engaged in time-based competition, easy access to a nearby international airport is a crucial factor. A 1998 study showed that the existence of a large airport in a metropolitan region increases the area's high-tech employment by over 12,000, and explains over 64% of the variation in high-tech employment across metropolitan regions (Button and Stough 1998). Another recent study concluded that high-tech workers in Orange County generate almost four times the number of air trips per employee than the average for the county (Erie et al 1998).

In an article entitled "The Q Factor", David Birch cites five factors that are crucial to attracting small, entrepreneurial high-tech firms: high quality research universities, a good quality labor force, air transportation, telecommunications infrastructure, and a local government willing to

make the necessary investments in such infrastructure (Birch 1987). Air transportation is key, because "whereas Fortune 500 executives can fly in and out of just about any town in the company jet, busy entrepreneurs and their salespeople need a major airport for their transportation" (Birch 1987). He also believes that businesses are willing to locate to areas that may cost more, but which have distinct quality of life advantages to attract a high-quality workforce.

The impact of airport-induced job growth on land use in the vicinity of airports is substantial. An analysis of employment growth in U.S. metropolitan areas showed that areas within four miles of airports added jobs two to five times faster than the overall growth rate of the larger area within which the airport was located. Most of the employment was concentrated immediately around the airport or along a major access corridor within fifteen minutes of the airport (Weisbrod et al 1993). New international airports recently constructed or under development in Hong Kong, Korea, and Malaysia are spawning substantial high-tech development around them, and will be the cornerstones of dynamic new "aviation cities" or "aerotropoli" (Kasarda 2000).

There are a number of high-tech centers or clusters around the country, including the Bay Area's Silicon Valley, Boston, Denver, Chicago, Austin (TX), Raleigh (NC), Fairfax County (VA), and New York's Silicon Alley. One common denominator for all of these areas is proximity to a major airport. Other factors leading to the formation of high-tech clusters are described below.

5. High-tech Clusters

A distinguishing feature of the New Economy is the very strong "herd mentality" among high-tech enterprises, to take advantage of what economists call "agglomeration effects." These businesses tend to concentrate in distinct clusters of like-minded companies. They seek geographic proximity with others engaged in similar activities, since the industry clusters formed foster pooled labor forces of workers that possess industry-specific skills, and facilitate technological innovations through informal relationships among employees and firms (DeVol 2000). Because knowledge is generated and transmitted more efficiently in close proximity, economic activity based on new knowledge has a high propensity to cluster within a geographic area (Audretsch 1998). As more firms move into or are started in an area, they make the location more attractive for subsequent firms, especially if support services provided by tech-savvy financial, accounting, and legal firms also gravitate to the area. The innovations fostered by firms both competing and collaborating within the cluster spin off other companies that further increase the size of the cluster.

Recent research shows that the adoption of new innovations declines with geographic distance from the source of the innovations (Keller 2000). Research facilities engaged in cutting-edge work are thus important prerequisites to the formation of high-tech clusters. Clusters in Silicon Valley and Austin, Texas owe their existence to nearby research centers and universities where important technological innovations were spawned. Research centers and institutions are indisputably the most important factor in incubating high-tech industries (DeVol 2000). These facilities conduct the basic research and train and educate the skilled labor that is critical in expanding and reinforcing the dominance of high-tech clusters. A new cluster can be formed by firms that have developed and commercialized a technology elsewhere, but the regions in which

the original research and development was performed have a distinct advantage in building a "critical mass" of cluster activity in the early stages of technological development. Knowledge derived from basic research can spawn innovation and create economic value much faster and more efficiently immediately around the location of its development.

Venture capital investments are critical in incubating and sustaining an entrepreneurial-based high-tech cluster. While comprising only a small share of overall capital markets, venture capital stimulates and supports business growth at the critical early stages. Besides financing, venture capitalists assist in business plan development, lend management skills, suggest strategic partnerships and alliances, assist in expansion plans, and can bring in key talent where needed. By financing new ideas, venture capitalists help build and sustain clusters as they provide the means for new firms to be formed. Without a well-functioning venture capital infrastructure, a regional technology cluster may not develop (DeVol 2000). Venture capital investments tend to enhance the "agglomeration effects" of high-tech clusters, since venture capital typically follows the "smart" money with a previous track record of success in business start-up investments.

The ongoing expansion of high-tech clusters around the country is creating severe traffic congestion, long commutes and related air quality problems. There has been a rapid growth of clusters in the northern Virginia suburbs of Washington, D.C.; in Redmond, Washington (i.e., Microsoft headquarters); in Austin, Texas; along the Route 128 Beltway in Boston; and along the Route 202 corridor outside of Philadelphia. All of these areas have also experienced a rapid increase in traffic congestion and commute times associated with the growth of the clusters (Miara 2000). In Austin, about 90 new jobs per day are being created, while about 50 new people move into the metropolitan area each day. Finding a place to live there has become a challenge, and traffic has become severely congested. The City of Austin now implores citizens to take public transportation to help relieve congestion and protect air quality (Barry 2000).

6. High-tech Clusters in the SCAG Region

In the SCAG Region, high-tech companies have established themselves primarily in the urban, coastal areas of the region. Maps 9 through 11 show current (1997) locations of high-tech employment clusters for computer software and hardware, telecommunications, and test and measurement equipment sectors. The biomedical sector (Map 12) and the entertainment sector (Map 13) are also included in the high-tech cluster. Employment data for each cluster is displayed by census tract. It should be noted that the size of each census tract is inversely proportional to its population density. Employment categories by SIC code that comprise each sector can be found in Table 26 in the Appendix of the report.

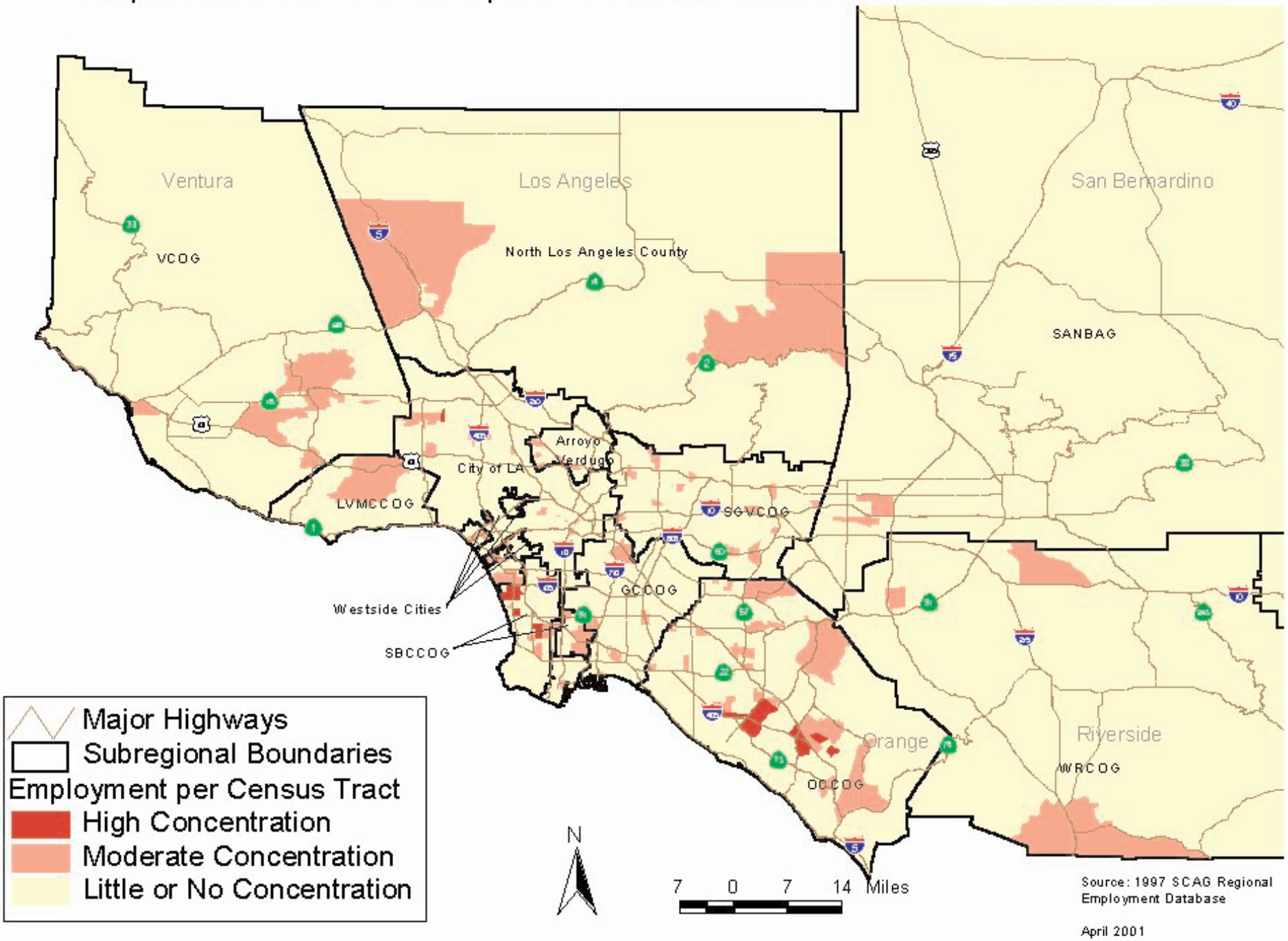
The biomedical sector (11,210 jobs in 1997) is included because its industries are on the cutting edge of technology. The employment in this sector is high paying and requires a high level of education. The biomedical technology sector has major clusters in central and northern Orange County, the area immediately around LAX, and the San Gabriel Valley area around Rte. 210.

The entertainment sector (134,025 jobs) is included because it is increasingly driven by innovations in digital technology, such as computer graphics, that are revolutionizing the industry. Major clusters in the entertainment sector can be found in a corridor extending from

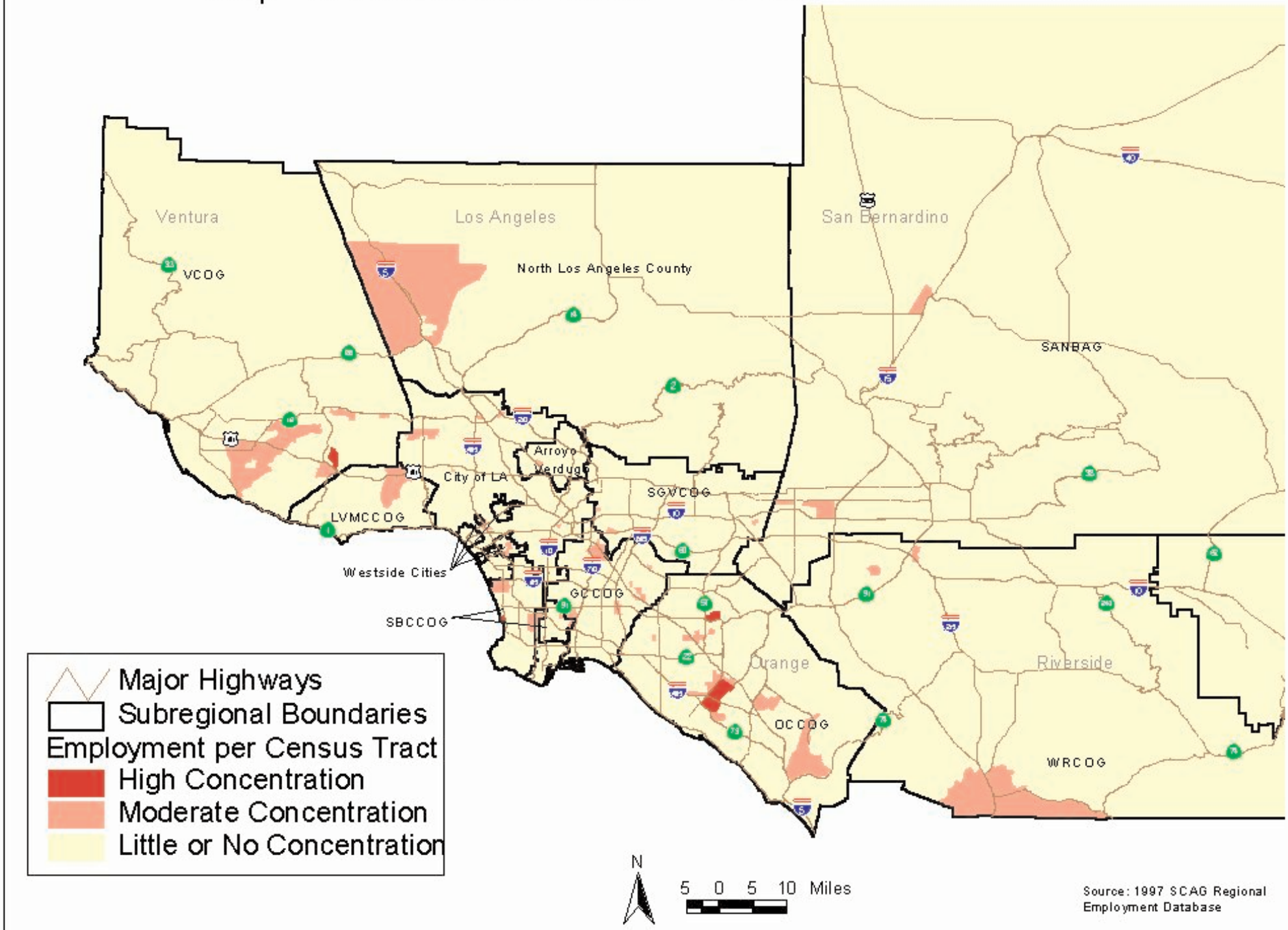
west Los Angeles and Culver City north to Burbank. Major clusters in the City of Commerce and in Irvine are related to the manufacture of audio, video, and photography equipment. Magic Mountain Amusement Park in Santa Clarita and Disneyland in Anaheim both employ high-tech innovators and a substantial numbers of employees (see Map 13).

The computer hardware and software (75,920 jobs), telecommunications (44,108 jobs), and test and measurement clusters (34,865 jobs) comprise the information technology sector, which is combination of Maps 9 through 11, and is arguably the most important high-tech sector in the SCAG Region. Firms in this sector tend to serve other businesses rather than sell direct to consumers. The primary markets that they serve are the healthcare, education, entertainment and business application markets. Employment in defense-related information technology firms has undergone a significant contraction since 1988. Many of the new information technology companies have been founded by former aerospace employees, and have relied upon the infusion of younger employees from California's university system to bring to them innovative and marketable ideas for technology applications. Compared to other regions, these companies are fairly dispersed, with the highest concentration of companies in central and northern Orange County as well as the South Bay. Most of these companies are small, and the dispersed nature of this cluster hinders the creation of linkages between firms within the cluster, to forge strategic relationships that allow combinations of technologies to be brought to bear in solving problems (Collaborative Economics 1995).

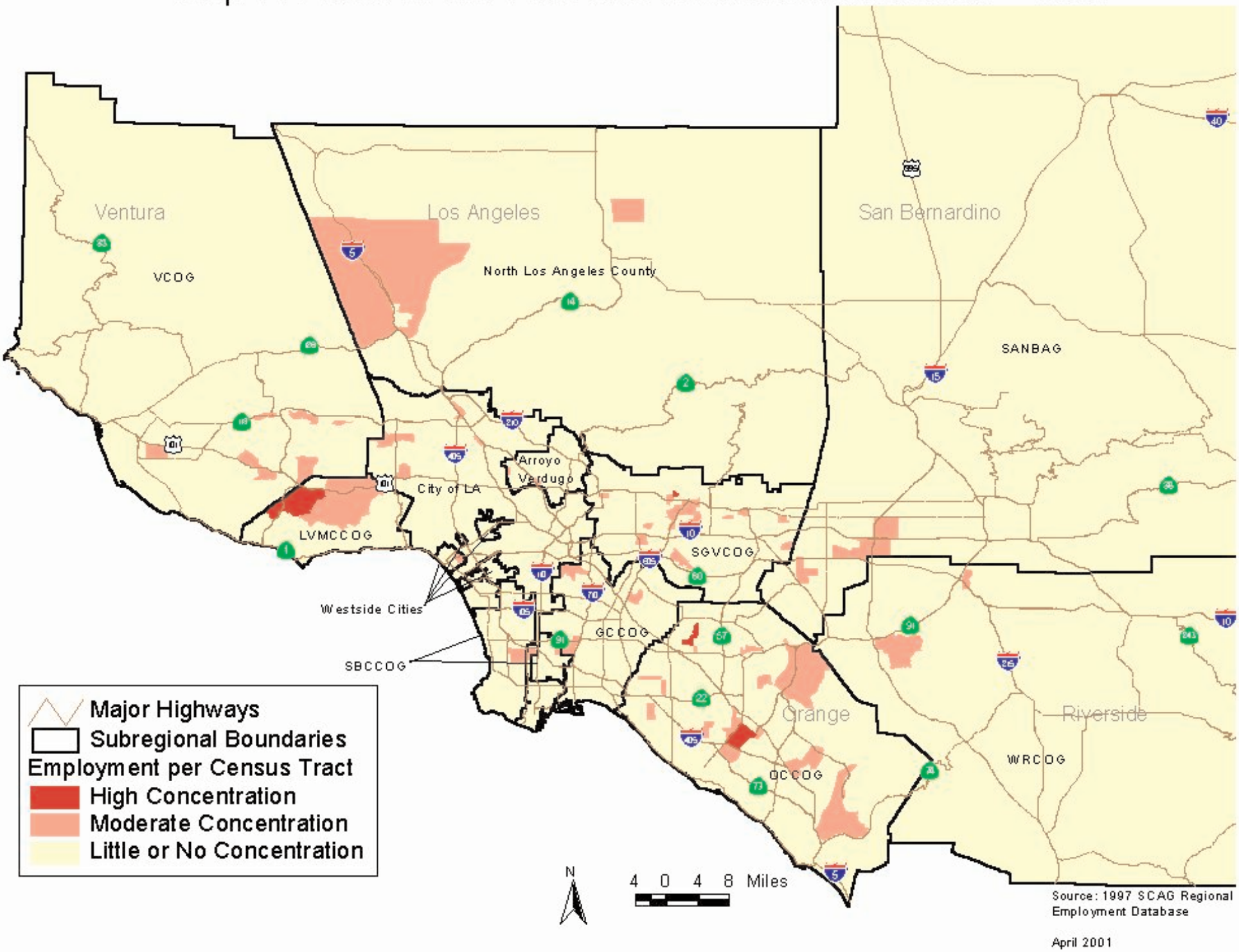
Map 9. Jobs in the Computer Hardware and Software Sector - 1997



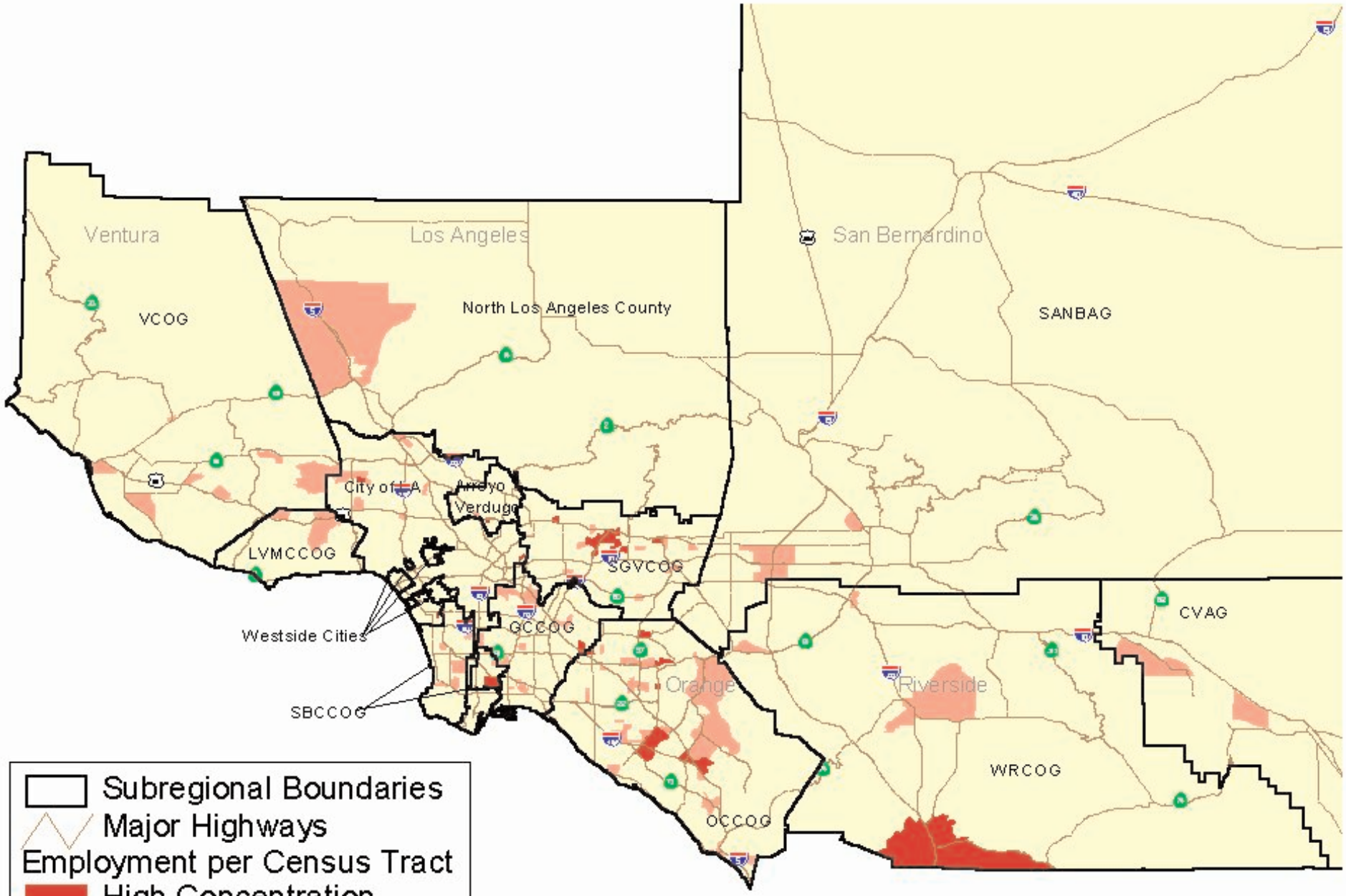
Map 10. Jobs in the Telecommunications Sector - 1997



Map 11. Jobs in the Test and Measurement Sector - 1997



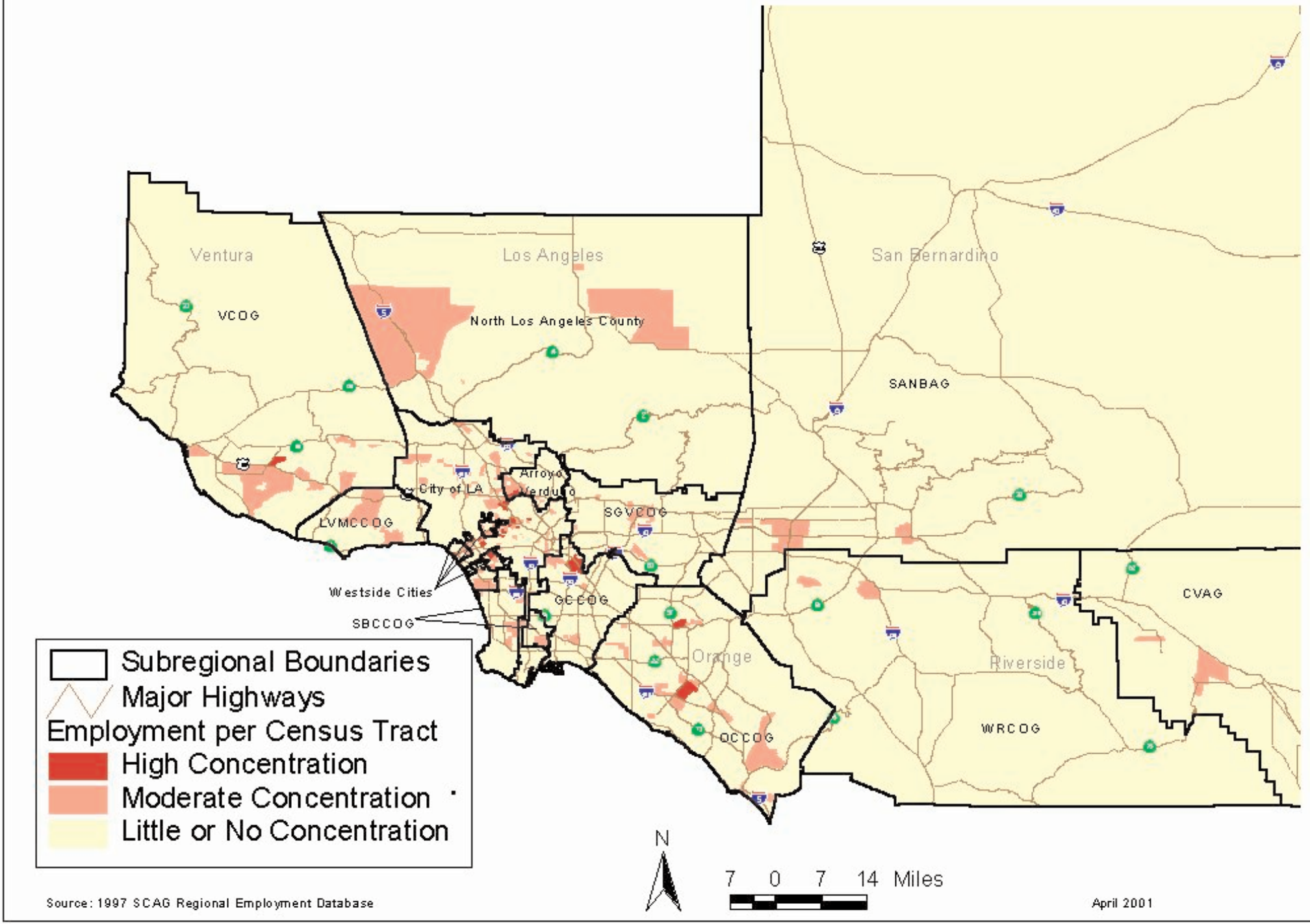
Map 12. Jobs in the Biomedical Sector - 1997



Source: 1997 SCAG Regional Employment Database

April 2001

Map 13. Jobs in the Entertainment Sector - 1997



Compared to other regions of the country where the New Economy predominates, the clustering of high-tech industries is less pronounced and relatively more dispersed in the SCAG Region. This could be due to a number of factors, including the greater geographic expanse and economic diversity of the region, the embryonic nature and lack of maturity of many high-tech companies and conversely, the inability of some older, established companies to attract venture capital investments. Also, the fact that many of the information technology companies in the region have closer relationships to the companies that they serve than to other high-tech firms in that sector has likely inhibited the formation of intensely collaborative clusters.

High-tech companies have established themselves primarily in West Los Angeles, Santa Monica, the San Fernando Valley, Culver City, the South Bay cities (particularly Torrance and El Segundo), and in Irvine, Costa Mesa, and Brea in Orange County (see Table 20). Being close to the ocean and beaches, world-class research universities (particularly University of California-Los Angeles, University of California-Irvine, and the University of Southern California) and the only major international airport in Southern California (LAX) are important factors that explain the location of high-tech firms in these areas.

Table 20

Top 10 Cities for Venture Capital Investment, SCAG Region, 4th Quarter 1998

City	Investment (In Millions $)	% of SCAG Region
Los Angeles	$1,125	22%
Santa Monica	$719	14%
Irvine	$614	12%
Culver City	$299	6%
Pasadena	$257	5%
Torrance	$223	4%
West Lake Village	$179	3%
El Segundo	$149	3%
Costa Mesa	$144	3%
Brea	$131	3%

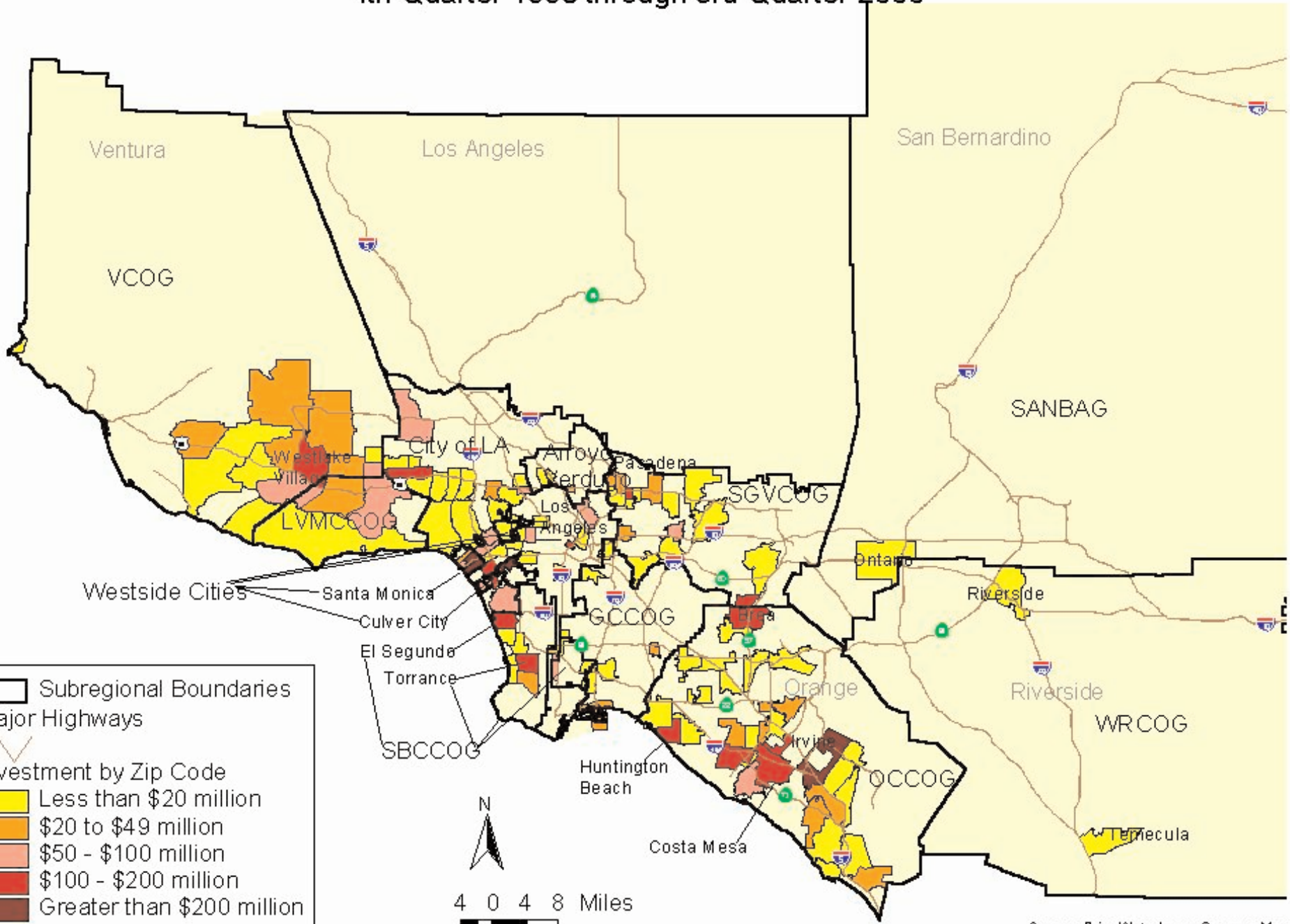
Source: PriceWaterhouseCoopers Money Tree Survey and Ventureeconomics.com

These areas are all jobs-rich, and the continued clustering of firms at these high-tech nodes will continue to exacerbate problems associated with job/housing imbalances, especially related to long commute distances. Santa Monica is establishing itself as a major player in the high-tech field. With the surge of new high-tech jobs there, traffic is now worse on I-10 travelling west from downtown Los Angeles than to downtown from Santa Monica. This is a reversal from historic traffic patterns, and signifies the diminished economic dominance of the central business district of Los Angeles in relation to Santa Monica and West Los Angeles (Shuit 2000).

Venture capital investments in the region closely correspond to the location of high-tech clusters in the information technology and biomedical technology sectors. As shown in Map 14, venture capital firms have recently made the majority of their investments in companies in Los Angeles,

Map 14. Venture Capital Investment in the SCAG Region

4th Quarter 1998 through 3rd Quarter 2000



Source: PriceWaterhouseCoopers Money Tree Survey and Ventureeconomics.com
April 2001

Irvine, Santa Monica and Culver City. Over the last two years, investments primarily have been in Internet communications, information management, and software development.

Venture capitalists also supported high-tech manufacturing industries, such as Capstone Turbine of Chatsworth and Precision Metals of Ontario. These data validate the thesis that venture capital investments are concentrated in existing high-tech clusters and reinforce their economic dominance. The exception seems to be investments in high-tech manufacturing, which involves standardized processes and lower skills levels, and is more sensitive to land and labor costs than research and development activities.

Venture capital investment is a key to attracting the high paying jobs of the New Economy. Map 15 shows projected employment growth by Transportation Analysis Zone. Much of the forecast job growth in Orange County and western Los Angeles County will be driven by venture capital investments that will create high paying New Economy jobs. However, the Inland Empire projects large job growth as well. Looking at recent venture capital investment and employment trends, a large portion of the job growth in the Inland Empire is expected to be comprised of relatively low paying blue-collar jobs in the Old Economy. Section VI includes strategies to help the Inland Empire attract the high paying jobs of the New Economy.

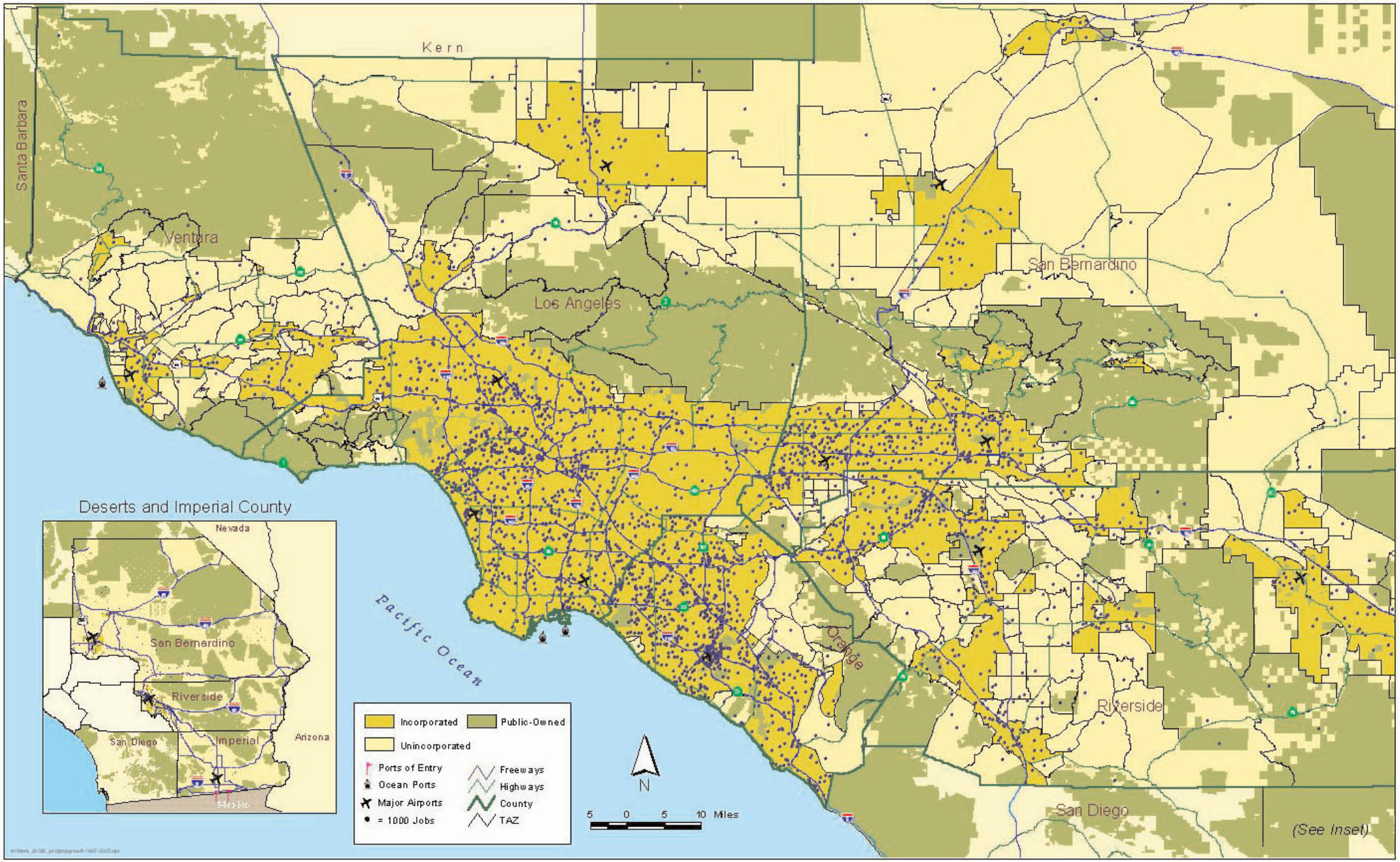
B. Fiscalization of Land Use

The previous section describes how the dynamics of the New Economy serve to reinforce existing jobs/housing imbalances, and counter the natural inclination of new job growth to move to locations where housing is in plentiful supply. This section will describe another recent phenomenon in California that also works to sustain current jobs/housing imbalances, by greatly weakening the incentive of local governments to support new housing development in urban areas. It was created by state voter initiatives that substantially reduced property tax revenues to municipalities, and greatly reinforced the tendency of local jurisdictions to promote land uses that generate the greatest tax revenues.

1. Propositions 13 and 218

Passed overwhelming by California voters in 1978, Proposition 13 places a limit on property tax rates of one percent of the value of the property. Before Proposition 13, properties were reassessed periodically and therefore property tax rates would increase as the property value rose. Increases in the valuation of property are now limited by Proposition 13 to 2% per year, and reassessments are made only upon a change of ownership. These changes have substantially reduced the amount of property tax revenue that goes to local governments. The percentage of total revenues derived from property taxes dropped from 33% in 1977 to 12% in 1996 for counties, and from 16% to 8% for cities (Chapman 1998). Furthermore, to shore up its budget deficits in the early 1990's, the State shifted a substantial portion of the property tax base of local governments to its General Fund.

Local governments, particularly cities, have largely made up for lost revenues from property taxes through increased business and users' taxes, fees and benefit assessments. However, these taxing powers were threatened by the passage of Proposition 218 last year. Under the provisions



Source: 1990 Tiger and '98 Thomas Bros. for cities incorporated after 1990; SCAG Transportation Analysis Zones; SCAG Population Forecast, adopted October, 2000

Map 15 - Job Growth in the SCAG Region by TAZ

1997 to 2025

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS
December 2000

of Proposition 218, all new taxes and assessments proposed by local governments are now subject to voter approval.

2. Local Sales Tax

In California, of the 7.25% sales tax collected on retail transactions, 1% is returned to local governments. Thus, for every hundred dollars in retail sales, one dollar is returned to municipalities according to where the transaction took place. The local sales tax has been a relatively small but steady source of income to local governments, comprising 9-12% of total funds over the last three decades (currently about 9%) (Lewis and Barbour 1999). Its importance lies in the fact that, along with property taxes and vehicle license fee revenues, it is the only source of discretionary revenue that is available to local governments for all purposes. Since Proposition 13, however, cities have been very limited in their ability to raise new revenues from the property tax. The sales tax thus has become increasingly significant for local governments, despite its relatively flat share of total revenues over the last three decades.

The local sales tax is not equally important to all cities. A few very high-income, low-density residential communities derive little income from sales taxes. This is apparently because they derive sufficient income from property taxes to fund city services, and view commercial development as an incompatible and undesirable land use. Also, some cities rely less on sales tax revenues than others, because they are older and had established a more diversified revenue base prior to Proposition 13 (Hoene 2000). Patterns of sales tax revenues per capita in the urbanized portions of the region can be seen in Map 16.

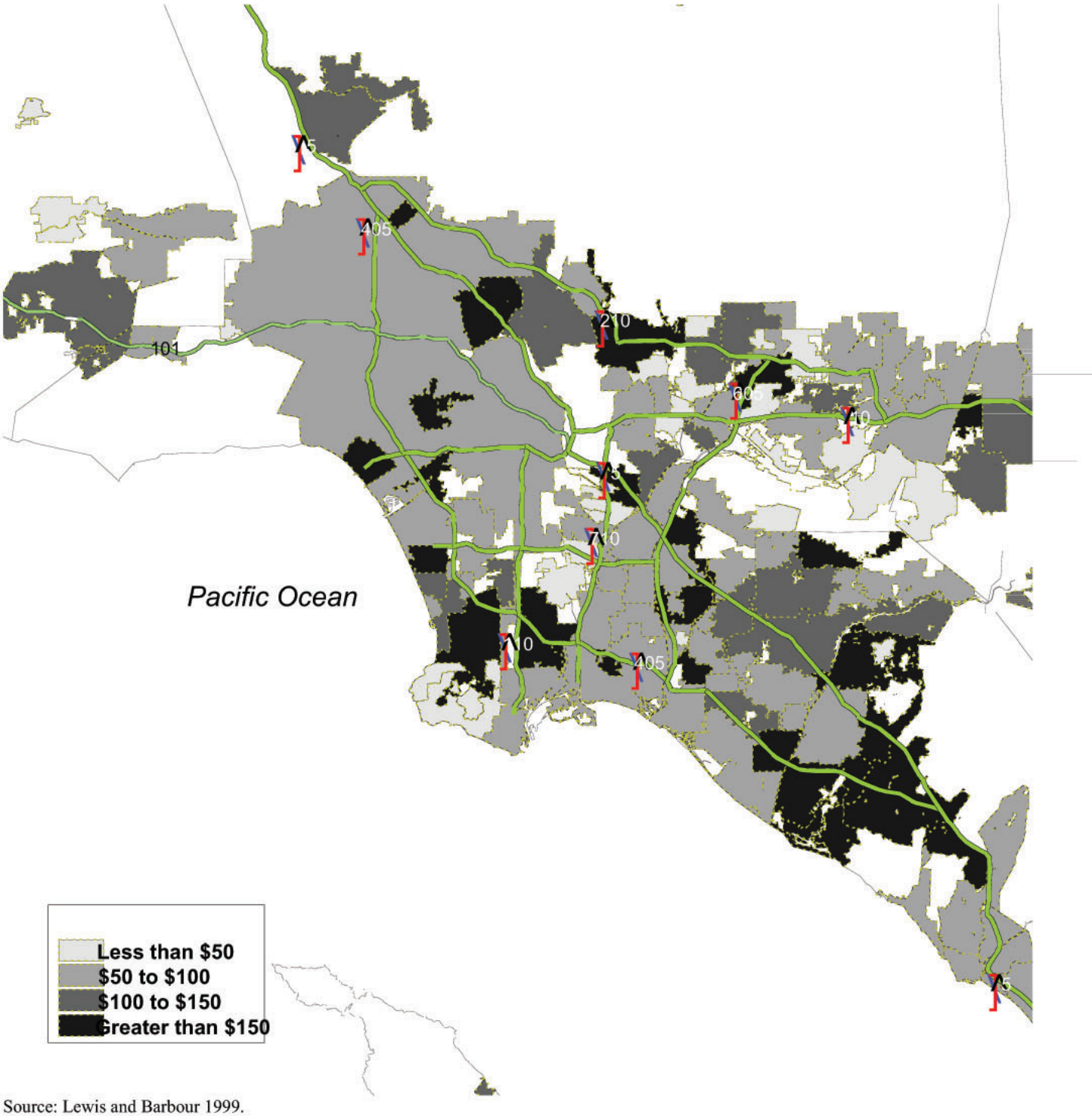
A recent study concludes that cities with the highest levels of sales tax revenues per capita are those with higher populations, fewer persons per household, good access to major highways, land devoted to redevelopment projects, and high income (except at the highest, upper-income levels) (Lewis and Barbour 1999). Cities with good freeway/highway access are presumably more attractive to major auto-oriented retail facilities, including auto malls and the "big box" stores that many cities covet. New cities in urban fringe areas and those with the highest population growth have relatively low levels of sales tax revenues per capita. This is most likely because they have had significant housing development but have not yet established a substantial retail base that can compete with well-established retail centers in urban core areas.

High sales tax cities are primarily in urban areas, with lower household sizes and a smaller percentage of children in the population. This is consistent with characteristics of areas in the region that have attracted high-tech clusters. In fact, there is a good correspondence of areas with high sales tax revenues per capita shown in Map 16 and the location of high-tech clusters and venture capital investments shown in Maps 9 through 11 and Map 14.

3. Sales Tax Competition

State records show that taxable sales as a proportion of personal income in the state have dropped by more than a third between 1950 and 1995 (Lewis and Barbour 1999). Recent trends in mail-order and Internet purchases are further contributing to declining sales tax revenues per capita, and have constrained local governments' collective ability to expand this desirable

Map 16.
Per Capita Sales Tax Revenues in the Los Angeles Area, 1995



Source: Lewis and Barbour 1999.

revenue source. However, the competition for sales tax dollars among cities has become increasingly intense, as cities fight over slices of a fixed revenue pie. This is because the local sales tax is one of the few revenue sources that can be substantially increased by an individual city as a result of decisions and actions to induce retail activity to locate within its borders. Since it is a zero-sum game, the winners in this contest to recruit retail business to their jurisdictions are only successful in shifting retail sales from one location to another within a region.

Much anecdotal evidence exists about cities offering various incentives and inducements to lure retail business to their jurisdictions, banking that in the long run they will derive a net benefit from the sales tax revenues. For example, according to *The Orange County Register*, in 1988 the City of Fountain Valley successfully landed a Price Club store (now Costco) which wanted to move from its Santa Ana location. Inducements offered to Price Club included 30 acres of land, an $8.8 million subsidy to help purchase land, and $3.5 million in capital improvements in the area. The city is more than getting its money back, and in the early 1990's, Fountain Valley hired six new police officers as a result of the sales tax revenues provided by the Price Club. Similarly, Buena Park was able to lure several car dealerships away from Fullerton by offering attractive incentives (Larsen 1999).

A more objective documentation of the preference of cities for retail development over other types of uses was developed by a recent survey, conducted by the Public Policy Institute of California, of top administrative officials (usually the city manager or administrator) of 330 California cities. The survey found that retail projects are the land use most preferred by city governments in California for both new development projects on vacant land and city redevelopment projects. This was followed, in order of preference, by office, mixed-use development, light industrial, single family residential, multifamily residential, and heavy industrial uses. The survey also found that of 20 possible factors influencing development and redevelopment decisions, "maximizing sales tax revenue" is ranked by 72% of cities as the primary factor motivating their decisions about development on vacant land, while two-thirds consider it the prime motivation on decisions about redevelopment projects. It is also ranked second by cities out of 12 potential factors that influence their annexation decisions. Cities ranked "likelihood of job creation" fifth and "meeting affordable housing needs" sixteenth as factors influencing both their development and redevelopment decisions (Lewis and Barbour 1999).

4. Land Use Impacts

What does this preference for retail uses by cities mean for local and regional land use and development patterns? At the local level, cities' recruitment of "big-box" stores and auto malls, that generate high levels of sales tax revenues per acre, can deplete the vitality of existing downtown areas. At the regional level, the preference of retail over other land uses, particularly residential, can have adverse impacts in terms of sustaining and reinforcing patterns of jobs/housing imbalance.

It is well documented that housing is viewed by many cities as a money loser, costing more in the services it requires than the limited property taxes it generates. Housing generates less property tax per acre than most other uses, no sales tax, and requires an investment in schools,

police, and other public services. New residents generate sales tax revenues only to the extent that they shop in the same city in which they live. As a consequence, cities may be reluctant to approve new housing projects, and provide zoned vacant land only for a limited amount of low-density housing, with large, expensive homes on large lots that generate more property tax revenues per new resident. The affluent residents that can afford the larger homes are also more likely to attract the high-end commercial uses that cities desire.

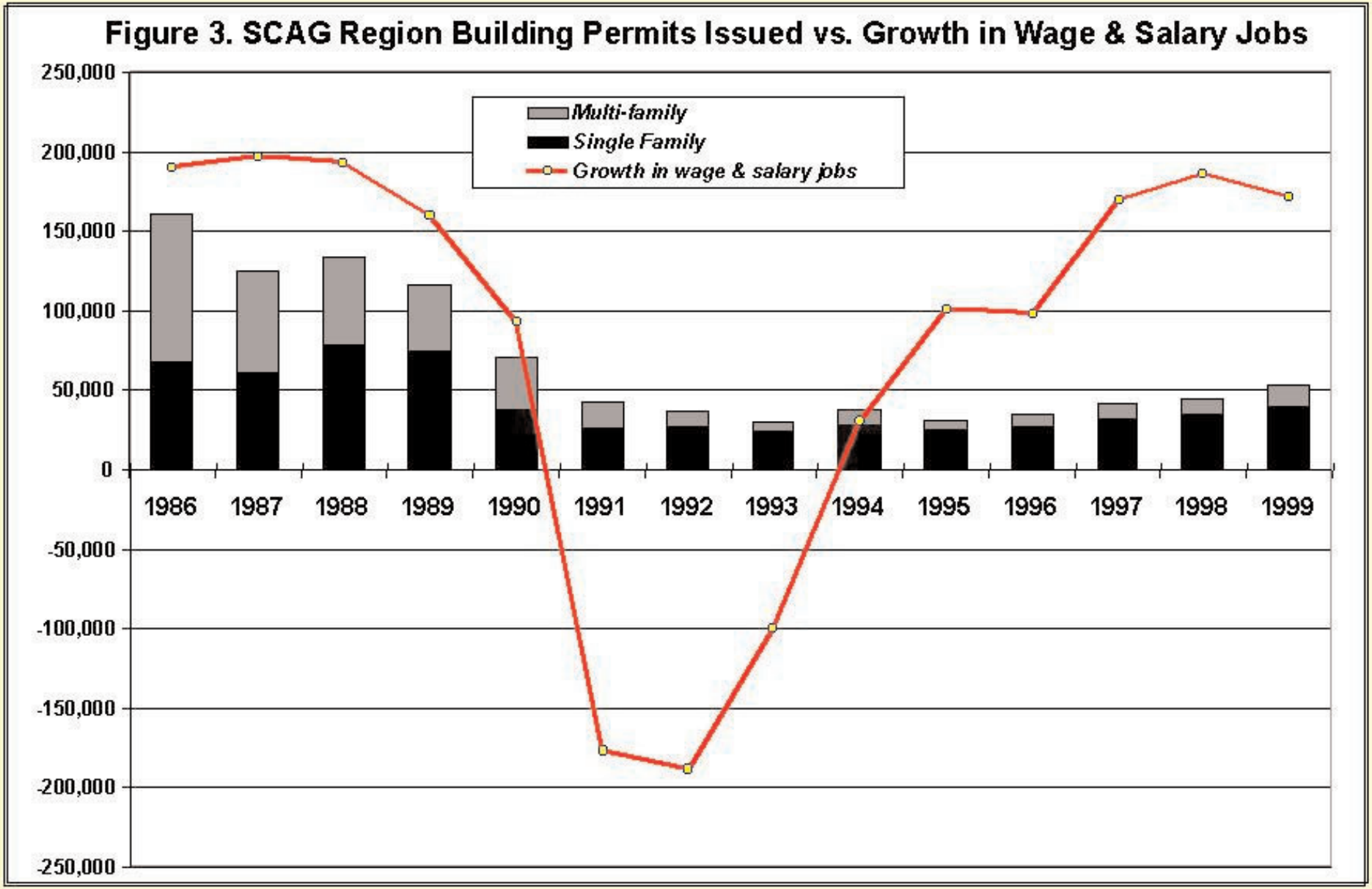
The "fiscalization" of land use that leads to "cash box" zoning thus serves to reinforce generally negative community perceptions about high-density housing that are longstanding and pervasive. Consequently, most local land use policies call for lower-density housing development and discourage attached multi-family housing. In combination with increased liability costs for condominium and town home construction, and increased land costs that constrain profits that can be gained from building low-cost housing, the construction rate of multi-family dwellings has plummeted as a result. More than two-thirds of the housing units built in the San Francisco Bay area since 1990 have been single-family detached homes (Association of Bay Area Governments 1999). In Orange County, there has been a 74% decline in multi-family dwellings built over the last ten years (Nguyen 1999). In Los Angeles County, less than 3,000 apartment units will be constructed this year despite the addition of 86,000 jobs (Sanchez 1999). The insufficient production of multifamily apartment units in the region since 1991 is displayed in Figure 3.

Conversely, cities are likely to zone more land for retail, office and light industrial uses than they need, in order to provide developers a large portfolio of potential land sites for these desired uses. They are also more likely to grant a general plan change or rezoning for these uses, and base their annexation decisions on the potential inclusion of uses within city boundaries that produce the greatest revenue.

This documented bias of many cash-strapped cities towards retail and against housing, particularly high-density, multi-family housing is contrary to achieving a more balanced geographic distribution between jobs and housing in the region. Retail uses generally create low-paying sales jobs filled by employees who typically cannot afford to purchase single-family homes. If an adequate amount of multi-family/rental housing is not supplied in tandem with the retail uses desired by cities, then retail employees are forced to commute to where this housing is available. Since commercial/retail centers are generally found in established urban areas with relatively high incomes, and affordable housing is most available in urban fringe locations, then long commutes for many retail and other service workers are inevitable. The net result is increased congestion, increased pollution, and declining quality of life. Like San Francisco and Silicon Valley, this problem is most acute where retail and other service workers (as well as some white collar workers) employed in and around high-tech clusters are forced to compete with affluent high-tech workers for scarce and expensive housing.

Local governments in California tend to view some land uses such as large retailers as fiscal "winners", and others like affordable high-density housing as fiscal "losers." Local governments typically seek to attract the winners inside their boundaries and steer clear of the perceived losers. This has led to a competitive approach to land use planning and has fostered an atmosphere of distrust and competition instead of cooperation between cities in the same region.

Figure 3. SCAG Region Building Permits Issued vs. Growth in Wage & Salary Jobs



Source: Construction Industry Research Board and California Employment Development Department

A lack of cooperation between local governments makes it exceeding difficult to achieve balanced land use goals on a regional basis.

In summary, the "fiscalization" of land use produced by Proposition 13 and subsequent initiatives and governmental actions has created a bias against the production of housing by local governments, and has served to dampen the production of much-needed housing. It has also exacerbated jobs/housing imbalances throughout the region, and fostered an atmosphere of competition and distrust among jurisdictions. In combination with the strong "agglomeration" economies of the New Economy that were previously discussed, the natural tendency of regional development to achieve jobs/housing balance over time is being thwarted by these new trends. This has negative implications for a region that is struggling to cope with increasing highway congestion with limited transportation dollars, and to meet increasingly stringent state and federal ambient air quality standards.

C. Expansion of Old Economy Industries Into Housing-Rich Areas

There are other major development trends in the region that are working toward increasing regional jobs/housing balance, and are helping to offset the trends previously described that are negatively impacting the goal of achieving jobs/housing balance in the region. One positive trend is the robust expansion of traditional "Old Economy" industries in housing-rich areas of the region, particularly the Inland Empire (i.e., Riverside and San Bernardino counties) and North Los Angeles County (i.e., Santa Clarita and Antelope Valleys).

1. Inland Empire

Historically a housing rich subregion of the SCAG region, the Inland Empire has reached a phase of developmental maturation that is beginning to achieve a much more balanced pattern of growth. From 1990-2000, it had Southern California's fastest growing economy, accounting for 40% of the 695,000 gain in overall Southern California employment (including San Diego County). This represented a 38% expansion of the local job market, compared to 9.6% for Southern California as a whole. During the 1990's the Inland Empire's job growth exceeded that of Santa Clara County, which contains Silicon Valley (275,000 vs. 155,000). Even during the period of recession from 1990 to 1994, the Inland Empire added 25,000 jobs while Southern California was losing 600,000 jobs. The Inland region did this despite the closure or downsizing of three major military air bases and loss of several large defense contractors. In the expansion years of 1997-2000, when the state added jobs at a rate of 2.8% to 3.4%, the Inland Empire grew at a rate of 4.6% to 5.7% (Husing 2000). Clearly, much of the economic energy of Southern California moved inland into Riverside and San Bernardino counties in the 1990's.

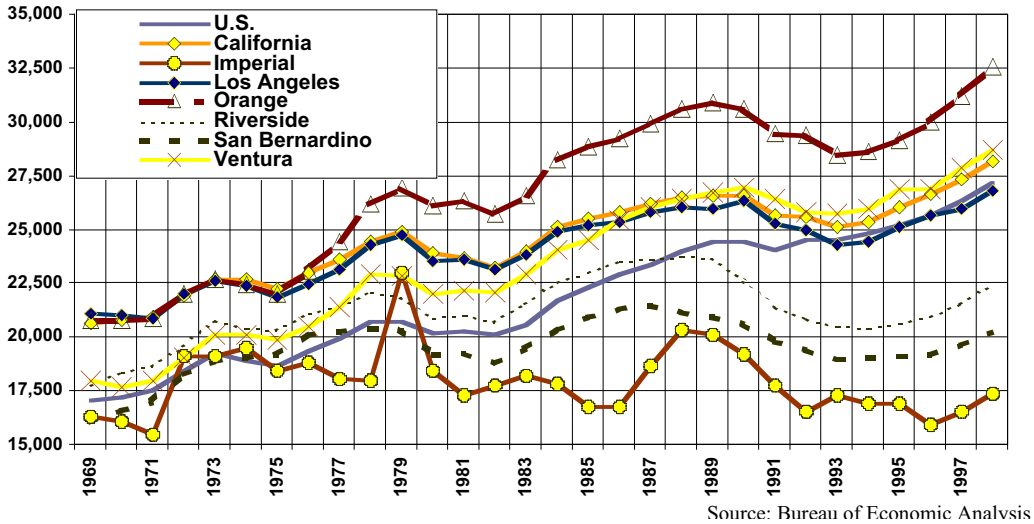
Most of this economic expansion was in blue-collar employment sectors. Of the 762 firms that either moved to the Inland Empire or expanded their operations there from 1994 to 2000, 56.6% were manufacturers and 33.1% were distributors. The Inland Empire thus is following the classic model of regional economic development--manufacturers and distributors are flocking to the area to take advantage of significantly lower land and labor costs than the average for the region, as well as lower housing costs and commute times for their employees. The availability of reasonably priced industrially zoned land, and superior intermodal rail, truck and air cargo

facilities in the Inland Empire have been lures to manufacturers and distributors. In an era of exploding international trade, Southern California has become the leading international gateway for the country, and the Inland Empire is becoming the goods handling and distribution center for Southern California. Map 17 shows the location of employment clusters associated with warehousing and trucking in the region (115,083 jobs in 1997), which are concentrated in the vicinity of Ontario International Airport.

Development is showing the first signs of pushing deeper in the Inland Empire, moving east, south and north to less expensive, outlying areas. Both industrial and housing development are moving east along the I-10 corridor to Fontana, Rialto, Colton and San Bernardino and along the Route 60 corridor to Riverside and the Moreno Valley-Perris area. Development is moving south along I-15 to Temecula, spurred by employment and population growth in Northern San Diego County.

Current trends bode well for increasing jobs/housing balance in the Inland Empire. From 1990 to 1999, a total of 202,600 local Inland Empire residents gained new employment, while local firms and agencies created 197,500 new wage and salary jobs. About 25,000 of the 202,600 people who gained employment were entrepreneurs. They do not account for any of the wage or salaried jobs. Therefore, the number of new people who went to work in the Inland Empire over the last decade exceeded the number of newly employed Inland Empire residents. Given current rates of population and employment growth, over the next ten years the growth of new workers and new jobs will likely balance (Husing 1999).

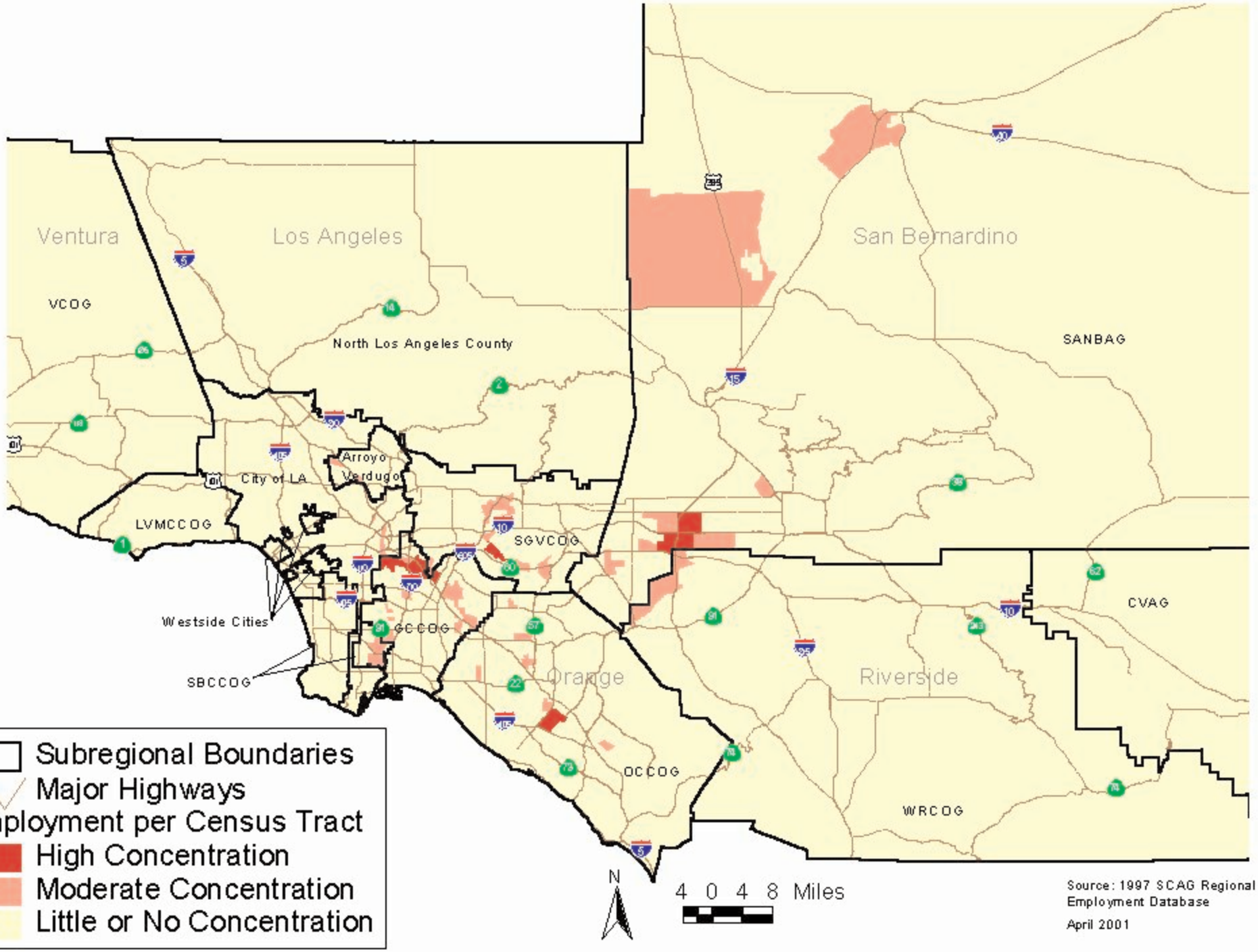
Figure 4. Comparison of Per Capita Personal Income
(1998 Constant Dollars)



Source: Bureau of Economic Analysis

However, one trend that has negative implications for achieving the benefits of jobs/housing balance is the increasing wage disparity between the Inland Empire and the rest of the region. As shown in Figures 4 and 5, over the last twenty-five years the per capita personal income of the Inland Empire has dropped significantly compared to the regional average (although Riverside County has closed the gap somewhat since 1996). This disparity can undermine the benefits of achieving a numerical balance between jobs and housing in the Inland Empire. For

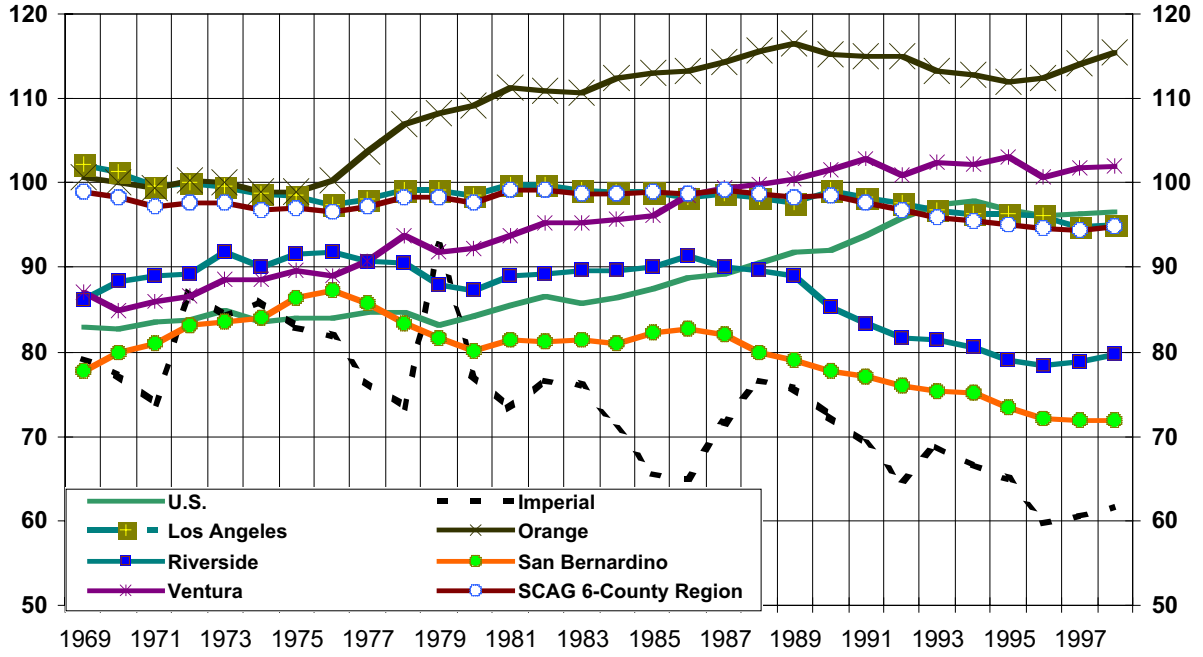
Map 17. Jobs in the Warehousing and Trucking Sector - 1997



example, it could be considered a logical lifestyle choice of many commuters to commute long distances to high-paying jobs in Los Angeles and Orange counties from their homes in the Inland Empire, where they can afford to buy expansive houses on large lots. Local governments and developers are inclined to provide that kind of housing if there is a market for it, because of the fiscal and financial benefits. However, as housing prices rise in the Inland Empire, many local employees become priced out of the local housing market.

This phenomenon is evidenced in Temecula in Riverside County, where new homes (average 1999 price: $207,000) are being bought primarily by commuters to North San Diego County, where housing is more expensive. Many workers employed in Temecula (average wage: $31,000) cannot afford the housing that is available, and must commute in from outlying areas where they can find housing that they can afford (Downey 2000).

Figure 5. Index of Per Capita Personal Income
(CA per capita Income = 100)



Source: Bureau of Economic Analysis

The logical solution to this dilemma is to both attract more higher paying jobs to the area, and to provide a portfolio of housing that is a better match to the local wage scale. Strategies to implement these kinds of solutions are examined in Section VI below.

2. North Los Angeles County

The northern portion of Los Angeles County (i.e., Santa Clarita and Antelope Valleys) has long been a housing-rich subregion of the SCAG Region. It is not unusual for workers living in this area of affordable homes to commute two hours or more each way to their jobs in the urban core areas to the south. In the Antelope Valley, more than 30% of residents are on the road at least two hours a day (Nazario 1996). Roughly 30% of the employed people who live in the Antelope

Valley commute to jobs someplace else (Howard 2000). This situation has been exacerbated by the fact that North Los Angeles County was disproportionately impacted by the recession in the early 1990's, losing many local jobs. Palmdale and Lancaster, with a combined population of 225,000 then, were particularly hard hit, losing about 40,000 well-paying (average $45-50,000/year) aerospace jobs.

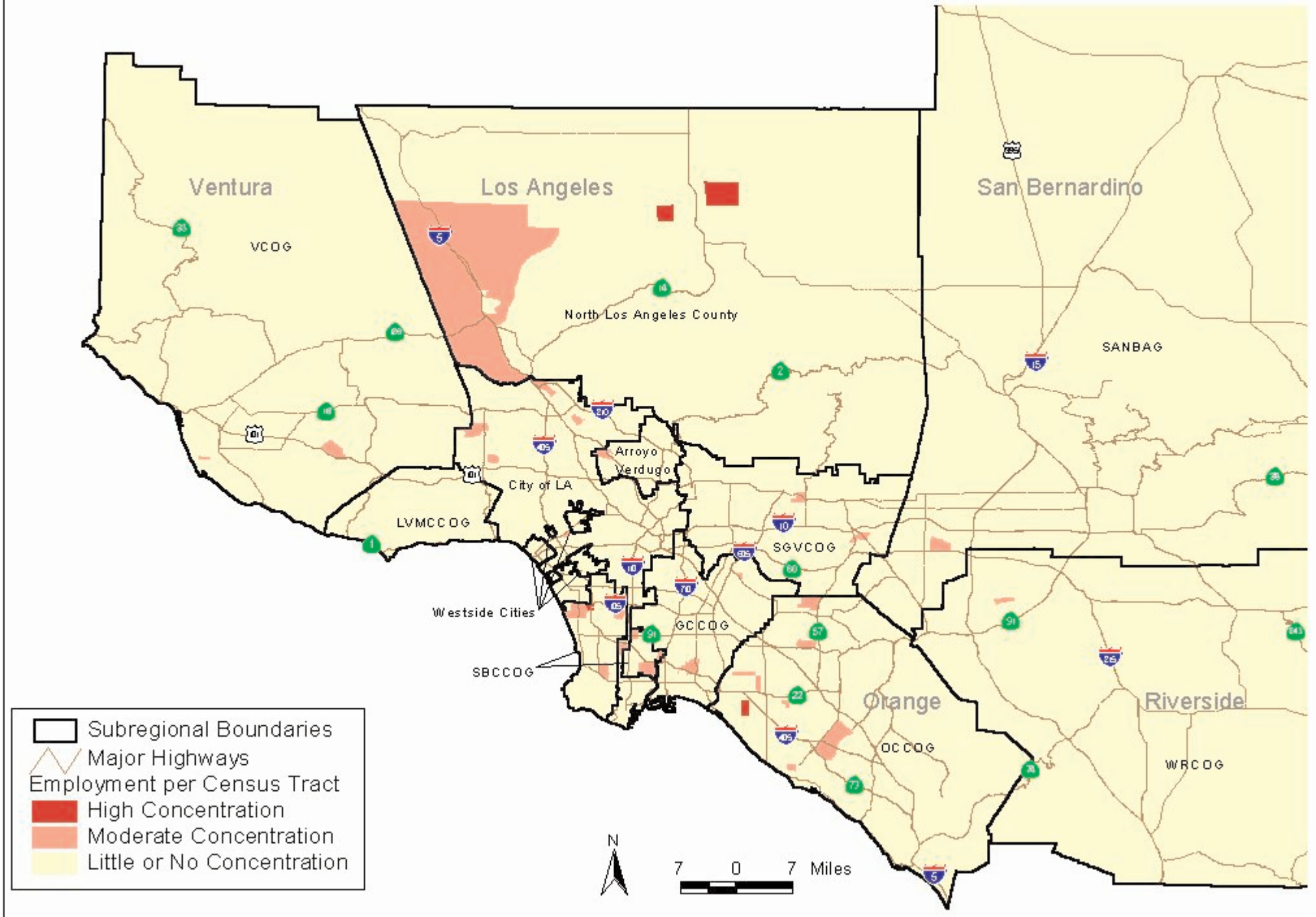
In the late 1980's, Palmdale was ranked as the nation's fastest-growing city. In the early 1990's, the Antelope Valley became known as the foreclosure capital of the world (Willis 1999). Since then, the housing market of North Los Angeles County has substantially recovered. The number of foreclosures in the Antelope Valley has fallen from about 100 a month in the early 1990's to about 10 per month, and median home prices jumped 23% from 1998 to 1999 (Netherby 1999). There has been an upward swing in residential sales, and many housing development projects that were put on hold because of the recession are now being revived. SCAG is forecasting a 169% increase in population in North Los Angeles County from 1994 to 2020 compared to 33% for Los Angeles County as a whole (Southern California Association of Governments 1998).

An even greater employment growth has been forecast for North Los Angeles County—199% from 1994 to 2020. Although this job growth is far from sufficient to bring the subregion into jobs/housing balance, it signals an encouraging trend. Although the area lost many aerospace jobs, there has been a consolidation of the vastly contracted aerospace industry in North Los Angeles County. Over the past decade, Lockheed Martin relocated its "Skunk Works" operations from Burbank to Palmdale in the 1990's and moved some of its C-130 maintenance work from Ontario, while Northrup Grumman moved some operations from Pico Rivera. The aerospace industry employs 21,000 people in the Antelope Valley, roughly half the total workforce (Netherby 1999). Map 18 shows the location of aerospace technology clusters in the region (42,409 jobs in 1997), with high-density aerospace employment around Air Force Plant 42 in Palmdale as well as Edwards Air Force Base to the northeast. If efforts to bring work in building the Joint Strike Fighter to Palmdale ($500 billion to $750 billion over the next 30 years) prove to be successful, this could substantially increase high-paying aerospace employment in the Antelope Valley.

Like the Inland Empire, North Los Angeles County has become attractive to warehouse operations and distribution firms because of its relatively inexpensive and developable land, low business taxes and tax credit incentives, fast-track permitting, affordable homes, and good access to Los Angeles markets to the south. Rite Aid Pharmacies and Michael's Arts and Craft's have both recently moved their distribution centers to the Antelope Valley. In addition, the Santa Clarita Valley serves as a low-cost haven for film and television production, as shown by the Entertainment Industry Cluster map in Map 13. There has also been substantial commercial development, sparked by the recent resurgence in residential growth and stabilization of the aerospace industry. In 2000, a Dillard's department store, Lowe's Home Improvement, Barnes and Noble, Linens 'n Things, Ross Dress for Less, and Sport Chalet opened in Palmdale (Howard 2000). These stores have added to the city coffers with their sales tax revenues.

Expansion of the Palmdale Regional Airport at the Air Force Plant 42 complex presents opportunities for the aerospace industry and air cargo companies to grow in North Los Angeles

Map 18. Jobs in the Aerospace Technology Sector - 1997



Source: 1997 SCAG Regional Employment Database

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County. SR Technics, a Swiss-based jumbo jet maintenance and repair company, recently decided to place its North American aircraft maintenance and overhaul operation at Palmdale Airport. They hired 150 employees by the beginning of August 2000 (Howard 2000), and could expand to employ 3,000 to 5,000 workers as the workers "maintain the SwissAir fleet as well as jets from thirteen other airlines" (Jergler 1999). City officials have been in talks with other aerospace companies that are looking to expand in Palmdale. Airport officials are marketing the airport to commercial airlines and have plans for a new 600,000 square-foot terminal (Bitton 2000). They have landscaped the grounds to make them more passenger-friendly, and have made runway improvements and are planning to build a cargo ramp to accommodate expected growth in air cargo. Plans are also underway to substantially improve ground access to the airport, including an east-west bypass that would connect the airport to Rte. 14 and I-15 near Victorville.

Although job growth in North Los Angeles County has not been as robust over the last several years as growth in the Inland Empire, the types of jobs have been on average higher paying. This is primarily related to the migration of white-collar employment from the San Fernando Valley up into the Santa Clarita Valley. Also, there is considerable potential for expansion of aerospace employment in the Antelope Valley due to the move of SR Technics aircraft maintenance operations to Palmdale, potential expansion of Palmdale Airport, and potential work on the Joint Strike Fighter at Air Force Plant 42.

D. Expansion of New Economy Industries Into Housing-Rich Areas

There are some encouraging signs that New Economy industries, despite their strong agglomeration tendencies within established high-tech clusters, are beginning, albeit tentatively, to spread to outlying housing-rich areas of the region. In the Inland Empire, local governments in partnerships with universities are proactively creating a fertile environment for New Economy companies to take root and flourish. Despite its robust economy, the Inland Empire would achieve a greater level of economic diversification, with more higher-paying professional-level jobs, if local efforts are successful in inducing New Economy companies to locate and expand there.

In the last three quarters, venture capital firms have invested in companies based in the Inland Empire in the cities of Ontario, Temecula, and Riverside. This may be a prelude of future investment activity within the region. There are several technology parks in the Inland Empire seeking new high technology firms and seeking venture capital investments for these firms. There are numerous colleges and universities in the region that are producing tech savvy graduates. Ontario International Airport and several former military airbases have great potential to accommodate expanding regional demands in commercial air travel and airfreight. Many of the conditions necessary for venture capital investment are in place in the Inland Empire. It will take time for these factors to forge the synergistic relationships that are necessary to successfully incubate New Economy clusters. These factors are discussed further in the section "Innovative 'New Economy' Mechanisms."

Another positive trend is the migration of information technology firms north from the San Fernando Valley into the Santa Clarita Valley, lured by the availability of developable

commercial and industrial sites with good freeway access to Los Angeles markets to the south. More than 40,000 people now work in manicured industrial and business parks that line the I-5 freeway in Santa Clarita Valley (Sanchez, 1999). Eventually, these types of high-paying jobs should also migrate north to the Antelope Valley to capitalize on its highly educated workforce of current and former aerospace employees. Attraction of New Economy knowledge workers to the Antelope Valley is likely contingent on the successful retraining of aerospace workers and the Valley's ability to attract venture capital to the area (there were no venture capital investments in North Los Angeles County over the last two years). Success in attracting commercial passenger and cargo airlines to Palmdale Airport would also serve as a catalyst in attracting information technology companies to the area.